UTAH DEPARTMENT OF TRANSPORTATION

TECHNICAL BULLETIN MT- 05.08 May 24, 2005

ASPHALT SURFACING MATERIALS- TYPICAL APPLICATION RATES

A designer should have a basic knowledge of how the various paving materials are placed in construction so they can correctly determine the correct paving quantities.



The information provided herein is approximate and for estimating purposes only; typical values have been assumed and any values may change considerably for a specific location. You should verify the unit weights with the Region Materials Engineer.

Surface Treatments

1. Open-Graded Surface Course

Weight: 135 lb/ft³

Asphalt: PG Binder, 6.25%

2. Chip Seal Coat

Emulsion: CRS-2, CRS-2P, LMCRS-2, HFMS-2P

0.35 gal/yd² (New Pavement) 0.45 gal/yd² (Milled Pavement)

3. Prime Coat

Cut-Back: MC-70 or MC-250

 0.5 gal/yd^2

4. Tack Coat

Emulsion: CSS-1, CSS-1H, SS-1, SS-1H (diluted 2 parts emulsion to 1 part water)

0.10 gal/yd² (New Pavement) 0.15 gal/yd² (Milled Pavement)

5. Flush Coat

Emulsion: CSS-1, CSS-1H, SS-1, SS-1H, HFMS-2P (diluted 2 parts emulsion to 1 part water)

 0.12 gal/yd^2

B. Surface Courses

1. Hot Mix Asphalt

Weight: 152 lb/ft³

Asphalt: 5.20% of total wet weight

C. Base Courses

1. Lean Concrete Base: bid by square yard, @ 4 inch thick

2. Untreated Base Course

Weight: 138 lb/ft³

3. Granular Borrow

Weight: 133 lb/ft³

FURTHER INFORMATION

UDOT Standard Specification 02745, Bituminous Materials UDOT Materials Technical Bulletin, MT-05.06, "Selecting and Using Asphalt Emulsions" Asphalt Institute Manual Series No. 19, "A Basic Emulsion Manual" Asphalt Institute Manual Serials No. 4, "The Asphalt Handbook"

UDOT CONTACTS

Tim Biel, Engineer for Materials, (801) 965-4859, tbiel@utah.gov
Rod Terry, Region One Materials Engineer, (801) 620-1606, rodterry@utah.gov
John Butterfield, Region Two Materials Engineer, (801) 975-4926, jbutterfield@utah.gov
James Cox, Region Three Materials Engineer, (801) 227-8035, jamesacox@utah.gov
Larry Gay, Region Four Materials Engineer, (435) 896-1306, jgay@utah.gov
Cameron Petersen, Asphalt Engineer, (801) 965-4296, jgay@utah.gov